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Colombia

Biotechnology

Agricultural Biothechnology

2006

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Report Highlights:
Biotechnology has not been a major issue in Colombia. Agricultural groups strongly support adoption of biotechnology, while some environmental groups have raised limited concerns. The only biotechnology materials planted on a non-restricted commercial basis in Colombia is Bollgard cottonseed from D&P Land Co. and Bollgard Roundup-Ready cotton to a lesser extent. Biotech blue carnations are approved for limited commercial production. There are pending license applications for other crops.The commercial materials originate mainly in the U.S., and the EU. The institutional regulatory framework is being developed.

Includes PSD Changes: No
Includes Trade Matrix: No
Unscheduled Report
Bogota [CO1]
[CO]

Section I. Executive Summary

Colombia is the largest market for U.S. agricultural products in Central and South America (Colombia is one of the top ten markets for US corn). Biotechnology requirements have not caused problems for U.S. exports.

The United States concluded the negotiation of a free trade agreement with Colombia on February 27, 2006 as previously expected, and its implementation will likely occur in late 2007 after the legal procedures are completed in both countries.

The Colombian legal framework for biotechnology, for both plants and animals, is composed of the following regulations (Resolution 3492 of December 22 of 1998, Resolution 2935 of October 23 of 2001, and Resolution 1063 of March 22 of 2005) by the Colombian Agricultural Institute (ICA); Colombia approved the Cartagena Protocol on Biosafety with law 740 of 2002. The law was later regulated by Decree 4525 of December 6, 2005. ICA also issued resolution 1063 of March 22, 2005, establishing the procedures for registration of those people and organizations involved in biotechnology production, imports, handling, research, etc. ICA's Resolution 946 of April 17, 2006 establishes procedures for living modified organisms (LMO's) to be used in agriculture, fishery, forestry and agro-industry.

The current status of biotechnology regulations in Colombia makes this a good time to develop educational and training activities to facilitate the issuance of science-based regulations.

The only biotechnology material planted on a non-restricted commercial basis in Colombia is Bollgard cottonseed from D&P Land Co. and Bollgard Roundup-Ready cotton. However, biotech blue carnations are approved for limited commercial production. It is for multiplication of exportable short-stem cut flowers under greenhouse conditions. There are pending license applications for other crops as shown in the attached table.

Colombian regulations require the labeling of biotech planting seeds and raw materials (such as grains), but they have not required labeling of processed food and feed made from biotech materials. However, there is a group called "Consumers for Colombia" which has proposed labeling of processed food. No resolution has been issued after a year of discussions.
The Ministry of Social Protection (previously known as Ministry of Health) is in charge of regulating LMO's labeling for consumers.

Local distributors charge biotech fees for each hectare planted with biotechnology seeds.

Section II. Biotechnology Trade and Production

a. The only biotechnology material planted on a non-restricted commercial basis in Colombia is Bollgard cottonseed from D&P Land Co. Bollgard cotton area has increased from 6,200 hectares in 2003 to 18,700 hectares in 2004, and 21,500 hectares in 2005, with 13,385 hectares planted in the interior valleys of Cauca and Tolima/Huila for harvest by mid-2006. Bollgard R&R cotton and biotech blue carnations are approved for limited commercial production. Area planted with Bollgard R&R has been less than 300 hectares. Blue carnations planted under greenhouse conditions are estimated at 4 hectares in central Colombia.

Colombia has not developed domestically any biotechnology crops as of this date, but there are several domestic organizations conducting some specific research projects. The sugar cane research center (Cenicana) is looking to develop a sugar cane variety resistant to cane

yellow leaf virus; the International Center for Tropical Agriculture (CIAT) is working on rice, grazing grass, and cassava; and the Coffee Research Center (Cenicafe) is working on a coffee variety that is resistant to coffee borer (broca). The latter has not received much emphasis due to European coffee consumer concerns about biotechnology-developed products. The research efforts have continued on coffee borer.

b. Colombia currently has several biotech crops in the process of regulatory approval for planting in Colombia. Some recent information indicates that Flower Development is working on roses with blue petals. Additionally, the following crops may be commercially released in 2008: Yield-gard and R&R corn by Monsanto; Herculex I corn (resistant to some lepidopterous) by Dupont, and corn Bt 11 (resistant to some lepidopterous) by Syngenta. The table in Appendix A lists all the products currently in the process and the status of approval. The Ministry of Agriculture has placed a priority on approval for planting of yield-gard corn. It seems unlikely, however, that the yield-gard corn will move into the semi-commercial trials in the short-run due to opposition from the Ministry of Environment. Although the Ministry of Agriculture (through the Colombian Agricultural Institute (ICA)) has the lead on biotechnology issues regarding agriculture, fishery, forestry and agro-industry, the Ministry of Environment is involved in regulatory approval of biotech materials released in the environment.

c. Colombia imports the following biotechnology seeds: Bollgard cotton (trade mark) resistant to lepidopterous insects, and Roundup-Ready cotton (trade mark) tolerant to round up herbicides. Delta and Pine Land Company owns both registered marks. The imported cottonseed originates in the U.S., as well as South Africa, Argentina and Australia, on some occasions.

d. Colombia receives limited food aid from the U.S. There are no biotech related restrictions on the food aid.

e. Colombia approved in 2000 the commercial release in the Bogota area of Dutch blue carnation for export only. The carnation exports are entirely destined to the European markets. Florigene in Holland developed this variety.

Section III. Biotechnology Policy

a. Regulatory framework for agricultural biotechnology:

i. Responsible Ministries: Ministry of Agriculture and Rural Development through the Colombian Agricultural Institute (ICA).
Ministry of the Environment, Housing and Territorial Development
Ministry of the Social Protection through Invima (for food products only)
Colciencias (Colombian Entity for the Development of Science and Technology)

ii. Decree 4525 of December 6, 2005, established three interagency committees responsible for evaluation and approval of biosafety issues:

a) National Technical Committee for Agriculture, Fishery, Forestry and Agro-industry.
b) National Technical Committee for Environment.
c) National Technical Committee for Health or Human Nutrition.

iii. The Government of Colombia has been a decisive supporter of agricultural biotechnology, but lobbying by some environmental groups has put pressure on

some GOC decisions. The GOC's structure for biotechnology regulations is based on making science-based decisions on accepting or rejecting new biotechnology products. The basic principle is to adopt the technologies that may help the economic/social development of Colombia. The Ministry of Environment has been the most conservative voice on biotechnology approvals.

b. Approved crops

i. Appendix A shows the applications received for introduction of biotechnology materials for different agricultural uses and their current status.

ii. The government of Colombia only allows biotechnology materials for commercial plantings after the material has been previously approved. In order to be approved, each variety with a specific gene must go through the approving process that is lengthy and has to comply with the strict regulations step by step. The approval is subject to an environmental risk assessment.

c. Colombia allows field-testing for biotechnology crops (see Appendix A) after a risk assessment that is submitted to the National Biosafety Council. The Council recommends ICA to conduct the biosafety evaluation. No estimated time for commercial release has been made due to institutional obstacles. These dissenting institutional reservations have to be resolved before new applications for admittance are considered.

d. The treatment given to "stacked" events consists of running the field-testing again as if the new seed were a completely new one. Although the individual traits were already accepted, the "stacked" variety has to begin the process all over.

e. There is no written regulation on the coexistence between biotechnology and non-biotechnology crops in Colombia. However, ICA has carried out an evaluation of cross-pollination on cotton and found out that both LMO and non-LMO's crops may coexist. Nevertheless, farmers continue to use buffer areas, i.e., a natural barrier of fallow terrain between the two plantings.

f. Finished packaged foods and feeds do not have a labeling requirement as of this date. Nevertheless, ICA resolutions (3492 of December 22 of 1998 and 2935 of October 23, 2001) require labeling on biotechnology materials (seeds or other plant reproductive materials and animal products). The requirement is based on consumer information.

g. Colombia approved the Biosafety Protocol through Law 740 of 2002 that became fully enforced in September 2003. As of today, regulations to implement the above-mentioned law are decree 4525 of December 6, 2005 and ICA resolution 000946 of April 17, 2006. Colombia follows the procedures established by the Biosafety Protocol and attends the different meetings to fully implement.

h. Trade contacts have reported no commercial barriers related to biotechnology products.

i. While there have been proposals to place additional restrictions on biotech products, no new requirements are currently pending. Restrictive new regulations were withdrawn for further review in April 2005 after concerns were raised by the industry and FAS/Bogota.

j. There is no legislation in place to collect "technology fees", but the biotechnology seed distributor charges the equivalent to US$75 per hectare planted to cotton. The fee is a key factor in adopting the new technology since the Colombian farmers complain that the seeds available were the first generation of biotechnology seeds for cotton. They are anxious to receive more advanced varieties.

Section IV. Marketing Issues.

a. Biotechnology is a relatively new issue in Colombia and there are few press commentaries about it. Most press coverage is favorable. Consumers have not voiced any concerns about biotechnology products or products containing biotechnology raw materials as of this date.

b. There are no relevant studies on marketing of biotechnology products in Colombia.

Section V. Capacity Building and Outreach

a. Outreach activities:

- Three leading Colombian journalists attended a biotechnology tour in the U.S. in September 2003.
- Farmer-to-Farmer Biotechnology Workshop at the University of Zamorano in Honduras. A leading cotton producer and agricultural leader attended in August 2004.
- In July 2004, two Colombian officials attended a two-week "Biotech Short Course" on regulator and trade issues at Michigan State University.
- A Cochran candidate was selected and approved to attend biotechnology training in February 2006.

b. Colombia would greatly benefit from more aggressive educational efforts on biotechnology issues. Some misinterpretations and misunderstandings among government officials rise from ignorance. Therefore, FAS/Bogota would like to work with appropriate USG agencies to put together programs addressed to solve doubts and hesitations. If appropriate, EMO, Section 108, and Cochran funds should be an option:

- An emphasis on the media would help to solve some of the public misconceptions. Something like a follow-up activity to the previous journalists visit of September 2003.
- Organized visits by specific commodity farmers to the United States would render great service in overcoming obstacles and in dissemination of the benefits of biotechnology.
- Organize an educational visit to the USG and private sector for GOC officials dealing with biotechnology regulations.
- Organize a seminar on relevant biotechnology aspects to disseminate information to GOC officials and interested parties.

APPENDIX A. COLOMBIA: BIOTECHNOLOGY APPLICATIONS AND CURRENT STATUS AS OF JUNE 2006

Crop	Requesting Company	New Characteristics of Biotechnology	Authorized Activity
Carnation	Flower Development	Blue Carnation	Approved in 2000 for multiplication of cut flowers. Approved for biosafety studies per risk assessment in 2005.
Roses	Flower Development	Blue petal roses	Approved for biosafety studies per risk assessment in 2005.
Bollgard Cotton	COACOL-Monsanto	Resistant to some lepidopterous insects.	Approved for commercial plantings since 2004.
RR Cotton	COACOL-Monsanto	Tolerant to Roundup herbicide.	Approved in 2004 for commercial plantings in the dry Caribbean and humid Caribbean regions. Approval pending for Huila and Tolima.
Bollgard/RR Cotton	COACOL-Monsanto	Resistant to a wider variety of lepidopterous insects and completely tolerant to Roundup herbicide.	Approved at a semi-commercial stage.
Bollgard II and Roundup Ready Flex Cotton	COACOL-Monsanto	Resistant to a wider variety of lepidopterous insects and completely tolerant to Roundup herbicide.	Approved for biosafety studies per risk assessment in 2005.
Rice	CIAT	Resistant to White Leaf Virus	Approved in 2000 for restricted research and small-scale plantings in open fields, in accordance with risk assessment.
Cassava	CIAT	Resistant to the borer of stem/stalk	Approved in 2000 for restricted research per risk assessment
Cassava	CIAT	Modification of cytokine production	Approved for biosafety studies per risk assessment in 2005.

Cassava	CIAT	Modification of amilopectin production	Approved for biosafety studies per risk assessment in 2005.
Cassava	CIAT	Modification of cyanide content	Approved for biosafety studies per risk assessment in 2005.
Brachiaria (grass)	CIAT	"frog hopper" resistant	Approved for biosafety studies per risk assessment in 2005.
Coffee	CENICAFE	Borer resistant	Approved in 2000 for restricted research per risk assessment.
Sugar cane	CENICAÑA	Resistant to the yellow leaf syndrome	Approved in 2003 for restricted research and small-scale plantings in open fields per risk assessment.
Yield-gard Corn	COACOL-Monsanto	Resistant to some lepidopterous insects	Currently under second phase of biosafety field trails.
RR Corn	COACOL-Monsanto	Tolerant to Roundup herbicide.	Currently under biosafety field trails.
Herculex I Corn	Dupont	Resistant to some lepidopterous insects	Approved for biosafety studies.
Bt 11 corn	Syngenta	Resistant to some lepidopterous insects	Approved for biosafety studies per risk assessment in 2005.
Potatoes	Corporacion de Investigaciones Biologicas (CIB)	Resistant to some lepidopterous insects	The National Biosafety Council postponed the study of risk assessment.